

THE INVENTION CLAIMED IS:

1. An aluminum rear case assembly for a trailer body, comprising a frame assembly comprising an extruded aluminum top rail, an extruded aluminum bottom rail, and a pair of extruded aluminum side rails connecting the top and bottom rails, the frame assembly defining a rectangular shape and having an exposed side facing outward from the trailer body when the rear case assembly is attached to the trailer body and an internal side configured to be attached to the trailer body.

2. The aluminum rear case assembly of claim 1 further comprising a light guard assembly attached to the bottom rail on the exposed side of the frame assembly, the light guard assembly comprising a pair of light guard members and a bumper member connecting the light guard members, the light guard members each defining at least one light-receiving socket.

3. The aluminum rear case assembly of claim 2 wherein the light guard members are formed of aluminum sheet material and the bumper member is formed of extruded aluminum, and wherein the light guard members are fixedly joined to the bumper member.

4. The aluminum rear case assembly of claim 2 wherein the light guard members and bumper member are integrally formed as one piece.

5. The aluminum rear case assembly of claim 1 further comprising a pair of stiffener members attached to the side rails, respectively, on the exposed side of the frame assembly for increasing the strength of the side rails.

6. The aluminum rear case assembly of claim 5 wherein the stiffener members are formed of aluminum sheet material and welded to the side rails.

7. The aluminum rear case assembly of claim 1 further comprising a pair of reinforcement plates attached, respectively, to the side rails and bottom rail on the internal side of the frame assembly.

8. The aluminum rear case assembly of claim 7 wherein the reinforcement plates are formed of aluminum sheet material and welded to the side rails and bottom rail.

9. The aluminum rear case assembly of claim 1 further comprising at least a pair of extruded aluminum hinges attached to the side rails, respectively.

10. The aluminum rear case assembly of claim 9 wherein the aluminum hinges are attached to the side rails by mechanical fasteners or by welds.

11. The aluminum rear case assembly of claim 1 further comprising cast aluminum corner joints connecting the bottom rail and side rails.

12. The aluminum rear case assembly of claim 11 further comprising cast aluminum corner joints connecting the top rail and side rails.

13. The aluminum rear case assembly of claim 1 further comprising cast aluminum corner joints connecting the top rail and side rails.

14. The aluminum rear case assembly of claim 1 wherein the top rail and side rails and the bottom rail and side rails are connected together by mechanical fasteners or welds.

15. The aluminum rear case assembly of claim 1 wherein the top rail and side rails are connected together by mechanical fasteners or welds and the bottom rail and side rails are connected together by cast aluminum corner joints.

16. The aluminum rear case assembly of claim 1 further comprising at least one extruded aluminum hinge member affixed to at least one of the side rails, the hinge member comprising an extruded aluminum base plate and an extruded aluminum hinge plate connected to the base plate by a pin, the hinge plate having a cylindrical portion for receiving the pin to connect the hinge plate to the base plate.

17. A method of making a rear case assembly for a trailer body, comprising the steps of:

extruding a top rail comprised of aluminum;

extruding a bottom rail comprised of aluminum;
extruding a pair of side rails comprised of aluminum; and
joining the top rail to the side rails and the bottom rail to the side rails to form a rectangular shaped frame assembly.

18. The method of claim 17 wherein the top rail is joined to the side rails by mechanical fasteners or welds.

19. The method of claim 18 wherein the bottom rail is joined to the side rails by mechanical fasteners or welds.

20. The method of claim 17 wherein the bottom rail is joined to the side rails by mechanical fasteners or welds.

21. The method of claim 17 further comprising the steps of casting a pair of aluminum corner joints and joining the top rail to the side rails with the corner joints, respectively.

22. The method of claim 21 further comprising the steps of casting a pair of aluminum corner joints and joining the bottom rail to the side rails with the corner joints.

23. The method of claim 17 further comprising the steps of casting a pair of aluminum corner joints and joining the bottom rail to the side rails with the corner joints.

24. The method of claim 23 wherein the top rail is joined to the side rails by mechanical fasteners or welds.

25. A trailer body, comprising a box-shaped cargo area having a rear end and an aluminum rear case assembly attached to the rear end, the aluminum rear case assembly comprising a frame assembly comprising an extruded aluminum top rail, an extruded aluminum bottom rail, and a pair of extruded aluminum side rails connecting the top and bottom rails, the frame assembly defining a rectangular shape and having an exposed side facing outward from the trailer body and an internal side attached to the rear end of the box-shaped cargo area.